

Claims

What is claimed is:

1. A method which comprises the following steps:
electronically determining a medical condition for a virtual patient;
electronically simulating a medical examination on the patient; and
electronically administering at least one course of treatment on the virtual patient.
2. The method according to claim 1, wherein the step of simulating the medical examination includes providing dynamic internal views and external views of organs and systems associated with the medical condition.
3. The method according to claim 2, which further comprises selecting the medical condition from the group consisting of cardiac arrest, ACS/AMI, CHF, DVT/PE, aortic dissection, pericardial tamponade, pneumothorax (tension & simple), asthma, pneumonia, appendicitis, AAA, perforated viscous, GI bleed (upper & lower), bowel obstruction, mesenteric ischemia, cholecystitis, renal colic, testicular torsion, TIA/CVA, seizure, and meningitis.
4. The method according to claim 1, wherein the step of simulating the at least one course of treatment includes medicating the virtual patient and providing dynamic internal views and external views of organs and systems affected by an administered medication.

5. The method according to claim 4, which further comprises selecting the medication used in medicating the virtual patient from the group consisting of saline, adenosine, nitroprusside, diltazem, epinephrine, amiodarone, thrombolytics, atropine, heparin, enoxaparin, furosemide, beta blocker, nitroglycerine, and aspirin.
6. The method according to claim 1, which further comprises visually indicating, with the virtual patient, at least one location of pain associated with the medical condition during the medical examination.
7. The method according to claim 1, wherein the step of electronically providing the medical condition includes altering a severity of the medical condition according to one of the at least one course of treatment and a timeliness of response in administering at least one preferred course of treatment.
8. The method according to claim 1, wherein the simulated medical examination includes performing ancillary testing selected from the group consisting of x-rays, CT scans, MRIs, EKGs, and laboratory data.
9. The method according to claim 1, wherein the step of simulating the at least one course of treatment includes performing a procedure selected from the group consisting of CPR, defibrillation, needle decompression, EKG, and intubations.

10. A system for indicating an electronic dynamic human body and simulating interactive patient care and treatment, the system comprising:
- an instructional database containing data for at least one medical condition having dynamic internal views and external views of organs and systems relevant to the medical condition and data for at least one patient profile;
 - an instructional processing device electronically connected to the instructional database, the processing device being configured to generate a virtual patient from the data of a selected patient profile and to simulate a medical examination and at least one course of treatment; and
 - an input control device electronically connected to the processing device to generate control signals interacting with the virtual patient and to alter the simulated medical examination and the simulated at least one course of treatment.
11. The system according to claim 10, further comprising a display device electronically connected to said processing device configured to visualize the effects of the simulated medical examination and the simulated at least one course of treatment on the virtual patient through dynamic internal views and external views of organs and systems.
12. The system according to claim 10, further comprising:
- a communications network electronically connected to the instructional processing device; and

multiple instructional consoles electronically connected to the communications network, each console observing the virtual patient and the simulated medical examination and the simulated at least one course of treatment.

13. The system according to claim 12, wherein the multiple instructional consoles each provide feedback containing a suggested course of treatment to the instructional processing device.

14. The system according to claim 10, wherein the instructional processing device includes a clock and the virtual patient is generated from data based on a real patient medical history, the virtual patient receiving the at least one course of treatment provided in the medical history.

15. An apparatus for medical instruction, comprising:
a machine readable medium containing instructions which, when executed by a machine, cause the machine to perform operations including:

generating a medical condition for a virtual patient; and
administering a simulated medical examination on the patient, the simulated medical examination having dynamic internal views and external views of organs and systems relevant to the medical condition.

16. The apparatus according to claim 15, wherein the machine readable medium contains instructions that cause the machine to administer at least one course of treatment on the virtual patient based in part on the simulated medical examination.

17. The apparatus according to claim 16, wherein the at least one course of treatment includes medicating the virtual patient.

18. The apparatus according to claim 17, wherein the machine readable medium contains instructions that cause the machine to observe the simulated effect of medicating the virtual patient on the medical condition with at least one dynamic internal view and at least one external view.

19. The apparatus according to claim 15, wherein the simulated medical examination is conducted according to information provided in a medical history of a real patient and the reactions of the virtual patient correspond to the reactions of the real patient recorded in the medical history.

20. The apparatus according to claim 15, wherein the machine readable medium contains instructions that cause the machine to alter a severity of the medical condition according to a timeliness of response in providing a preferred course of treatment.